

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Nicholasville Nitric Acid Spill - Removal Polrep
Initial and Final Removal Polrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV**

Subject: POLREP #1
Initial/Final
Nicholasville Nitric Acid Spill

Nicholasville, KY
Latitude: 37.9358293 Longitude: -84.5376443

To:

From: Stephen Ball, On Scene Coordinator

Date: 3/14/2013

Reporting Period: 3/11/2013 - 3/13/2013

1. Introduction

1.1 Background

Site Number:	Contract Number:	
D.O. Number:	Action Memo Date:	
Response Authority: CERCLA	Response Type:	Emergency
Response Lead: PRP	Incident Category:	Removal Action
NPL Status: Non NPL	Operable Unit:	
Mobilization Date: 3/11/2013	Start Date:	3/11/2013
Demob Date: 3/13/2013	Completion Date:	3/13/2013
CERCLIS ID:	RCRIS ID:	
ERNS No.:	State Notification:	
FPN#:	Reimbursable Account #:	

1.1.1 Incident Category

Emergency

1.1.2 Site Description

The site is a warehouse building with several tanks contained inside. The tanks were part of a system where nitric acid was reacted with calcium hydroxide to make calcium nitrate. This product would then be used to reduce odors at sewage lift stations.

The building is located at the top of a hill in an industrial park. Rural residential areas are located to the north, east and south of the site approximately 0.25 to 0.5 miles away. Industrial buildings are located immediately to the west.

1.1.2.1 Location

145 Eisenhower Ct.
Nicholasville, KY

1.1.2.2 Description of Threat

Nitric Acid was released from a tank into concrete secondary containment. The acid reacted with the concrete and high humidity to produce an acid cloud, which migrated to the north and east towards a residential area. Numerous businesses were also located in the immediate surrounding area.

Nitric Acid is a hazardous substance as defined by 40 CFR 302.4 and this release does pose a threat to public health and welfare of the United States according to the criteria for a removal action listed in 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

During the evening of 3/11/13, 2400 gallons of nitric acid spilled from the bottom of a tank into concrete containment due to incompatible flange and piping. A fuming reaction occurred and a plume of acid released to the north east towards a residential area. Unified Command implemented a 1/4 mile evacuation which impacted approximately 6 residences. The Bluegrass Regional Hazmat response team responded along with KYDEP personnel. The responsible party, Aulick Chemical, hired a clean-up contractor who worked through the night to pump acid into tanker truck. KYDEP requested EPA assistance to conduct air monitoring operations and assist with residential impact assessments. OSC Ball and START TTEMI mobilized during the night of 3/11/13.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA arrived on scene early in the morning on 3/12/13 and integrated with unified command. At the time EPA arrived the majority of acid had been vacuumed into a tanker truck and was no longer off gassing at any significant concentrations. After some planning discussions EPA personnel were tasked to assist in the resident rehabilitation on 3/12/13. A team of response personnel including the EPA OSC, START, KYDEP, County EMA and Department of Public Health met with families in 5 of the 6 homes that were evacuated. Each home was tested for residual acid vapors with an SPM as well as acid deposition with pH wipe samples on indoor as well as outdoors surfaces. No detections were found. After discussions with ATSDR it was also recommended to each resident to wash down all solid surfaces with soap and water as well as discard any food left exposed during the evacuation. The 6th resident was not available during the time of rehabilitation and the EMA director committed to following up with the family based on all non-detects at the other, close-by homes.

Concurrently to the rehabilitation mission, START deployed SPM air monitors equipped with VIPER at the source building. The purpose was to gather an air monitoring data set during residual contamination clean-up activities. The clean up contractor pressure washed the concrete inside and around the secondary containment to removal residual acid staining. During these operations the air concentrations of nitric acid were stable from 3 - 5 ppm. The PEL is 2ppm, so EPA recommended to the clean up contractor that they remain in level C PPE during the clean up activities.

At approximately 5pm the clean up contractor completed residual contamination clean up. EPA transitioned oversight to KYDEP and demobed.

2.1.2 Response Actions to Date

- Resident rehabilitation and home screening
- Air monitoring during residual clean up ops

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Aulick Chemical Solutions is the responsible party. The OSC issued a NOFI to the owner of Aulick Chemical Solutions.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

No further response activities planned

2.2.1.2 Next Steps

Response complete

2.2.2 Issues

Local Media interest was high.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

EPA

KYDEP

Local Fire

3.2 Cooperating Agencies

Bluegrass Regional Hazmat Team

Jessamine County EMA

ATSDR

County Department of Public Health

4. Personnel On Site

EPA

START

KYDEP

Jessamine County EMA

County Department of Public Health

Bluegrass Regional Hazmat Team

Pecco Inc. - clean up contractor

Aulick Chemical personnel

5. Definition of Terms

EPA - Environmental Protection Agency

OSC - On- Scene Coordinator

KYDEP - Kentucky Department of Environmental Protection

NCP - National Oil and Hazardous Substances Pollution Contingency Plan

NRC - National Response Center

CFR - Code of Federal Regulations

RP - Responsible Party

NOFI - Notice of Federal Interest
EMA - Emergency Management Agency
START - Superfund Technical Assessment and Response Team
ATSDR - Agency for Toxic Substances and Disease Registry
SPM - Single Point Monitor
PEL - Permissible Exposure Limit

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.